

ABSTRACT OF THE DISCLOSURE

5 A closed loop system uses (a) the intensity of the
diaphragm electromyogram (EMG) for a given inspiratory volume; (b) the
inspiratory volume for a given EMG intensity; or (c) a combination of (a)
and (b); in view of controlling the level of gas flow, gas volume or gas
pressure delivered by a mechanical (lung) ventilator. The closed loop
ventilator system enables for automatic or manual adjustment of the level
of inspiratory support in proportion to changes in the neuro-ventilatory
10 efficiency such that the neural drive remains stable at a desired target
level. An alarm can also be used to detect changes in neuroventilatory
efficiency in view of performing manual adjustments.

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